

What is claimed is:

1. A process for preparing a separator having at least one glass fiber media stage; the process of including a step of:
  - 5 (a) including, as a glass fiber media stage in the separator, a glass fiber media stage prepared according to a process of:
    - (i) preparing an aqueous slurry including glass fibers;
    - (ii) forming a fiber matrix from the glass fibers in the aqueous slurry;
    - 10 (iii) providing, from an aqueous system: a resin; and, an inorganic agent to precipitate the resin into the fiber matrix; and,
    - (iv) curing the resin in the matrix with the inorganic agent present to form a glass fiber matrix with resin distributed therethrough.
- 15 2. A process according to claim 1 wherein:
  - (a) the steps of: preparing an aqueous slurry including glass fibers; forming a fiber matrix; and, providing, from an aqueous system, a resin and inorganic agent into the fiber matrix, together comprise:
    - 20 (i) providing the inorganic agent, resin and glass fibers in an aqueous slurry; and,
    - (ii) loading the fibers, resin and inorganic agent from the slurry onto a mandrel, by applying a vacuum draw to the mandrel, to form a fiber construction; with resin distributed therein.
- 25 3. A process according to claim 2 wherein:
  - (a) the step of providing the inorganic agent, resin and glass fibers in a slurry comprises providing glass fibers having lengths of less than 5 mm.
- 30 4. A process according to claim 3 wherein:
  - (a) the step of providing the inorganic agent, resin and glass fibers in a slurry comprises providing borosilicate glass fibers.

5. A process according to any one of claims 2-4 wherein:
  - (a) the step of providing the inorganic agent, resin and glass fibers in a slurry comprises providing, as the inorganic agent, alum.
- 5 6. A process according to any one of claims 2-5 wherein:
  - (a) the step of providing the inorganic agent, resin and glass fibers in a matrix comprises providing, as the resin, a latex resin.
7. A process according to claim 6 wherein:
  - 10 (a) the resin is selected from the group consisting essentially of: acrylic-urethane hybrid latex and carboxy-modified acrylonitrile-styrene-butadiene latex.
8. A process according to claim 5 wherein:
  - 15 (a) the resin is selected from the group consisting essentially of: acrylic-urethane hybrid latex; carboxy-modified acrylonitrile-styrene-butadiene latex; and, a solution of substituted polycarboxylic acid with a polybasic alcohol cross linker.
- 20 9. A process according to any one of claims 2-8 wherein:
  - (a) the step of preparing an aqueous slurry including glass fibers comprises adding glass fibers to water which has been pH adjusted to between 2.5 and 3.5.
- 25 10. A process according to any one of claims 1-9 wherein:
  - (a) the step of preparing an aqueous slurry including glass fibers comprises adjusting a pH of water, to which the glass fibers are added, with sulfuric acid.
- 30 11. A process according to any one of claims 2-9 wherein:
  - (a) the step of providing the inorganic agent, resin and glass fibers in an aqueous slurry comprises:
    - (i) adding glass fibers to an aqueous system and dispersing the fibers with a mixer to form a dispersed fiber slurry;

- (ii) adding the resin and inorganic agent to the dispersed fiber slurry.
12. A process according to claim 11 wherein:
- 5 (a) the step of adding the resin and inorganic agent to the dispersed fiber slurry comprises providing a resin content such as to provide a resulting matrix with a resin content of no greater than 20%.
13. A separator including at least one glass fiber media stage made in accord
- 10 with a process of at least one of claims 1-12.
14. A separator having at least one glass fiber media stage; the at least one glass fiber media stage comprising:
- 15 (a) a formed media tube comprising: glass fiber media; resin and inorganic agent formed from an aqueous dispersion including the glass fiber media, resin and inorganic agent.
15. A separator according to claim 14 wherein:
- 20 (a) the glass fiber resin comprises borosilicate glass fibers; and,
- (b) the inorganic agent comprises alum.
16. A separator according to any one of claims 14 and 15 wherein:
- 25 (a) the separator is an air/oil separator; and
- (b) the at least one glass fiber media stage comprises a coalescing stage.
17. A separator according to any one of claims 14-16 including:
- 30 (a) a drain stage;
- (b) the coalescing stage and drain stage being secured to a separator flange.
18. A separator according to claim 17 wherein:
- (a) the drain stage comprises material selected from: non-woven polyester material, metal fibers; and, bonded glass fibers.

19. A process for preparing a separator having at least one glass fiber media stage, the process including a step of:
  - (a) including, as a glass fiber media stage in the separator, a glass fiber media stage made according to a process of:
    - 5 (i) preparing an aqueous slurry including glass fibers and resin; the resin being in an amount to provide a resin solids content within the range of 1.67 g to 2.02 g per gallon of water; and,
    - (ii) forming a fiber matrix having resin therein from the glass fibers in the slurry.
- 10 20. A process according to claim 19 wherein:
  - (a) the slurry contains 7.6 grams of fibers per gallon of water.
21. A process according to any one of claims 19 and 20 wherein:
  - 15 (a) the slurry contains between 0.0625 g and 0.25 g of alum, per gram of fiber.
22. A process according to any one of claims 19-21 wherein:
  - (a) the slurry includes a resin content sufficient to provide 20% resin content in the fiber matrix.
- 20 23. A separator made according to the process of at least one of claims 19-22.